

⑤ Find the solution (using graphing)

$$2x + y = 3$$

$$3x - 2y = 8$$

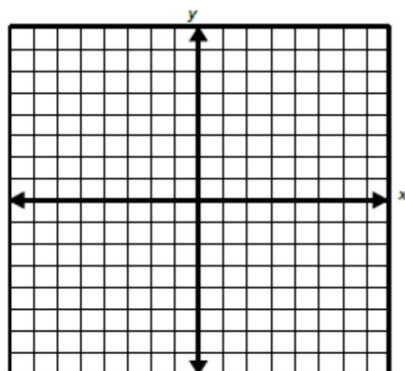
$$(2, -1)$$

CONSISTENT
INDEPENDENT

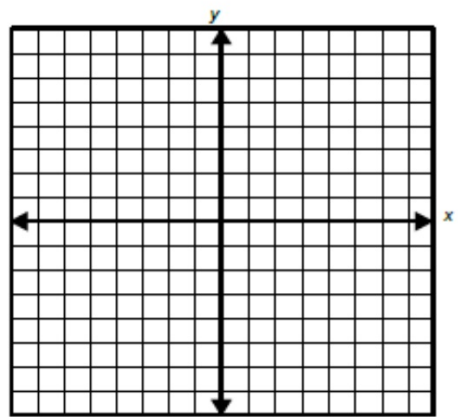
$$\begin{aligned} 1. \quad f(x) &= x^2 + 4x \quad g(x) = 3x - 2 \\ f(g(x)) &= f(3x - 2) \\ &= (3x - 2)^2 + 4(3x - 2) \\ &= (3x - 2)(3x - 2) + 12x - 8 \\ &= 9x^2 - 6x - 6x + 4 + 12x - 8 \\ &= 9x^2 - 4 \end{aligned}$$

Graph and classify each system. Then find the solution from the graph.

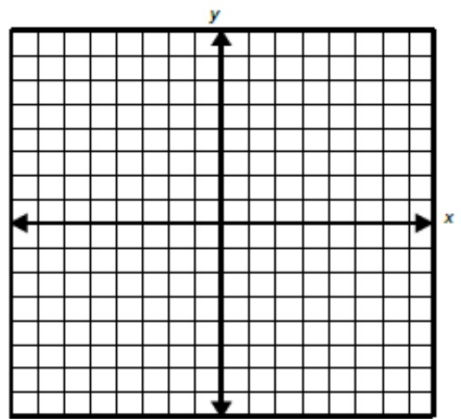
1)
$$\begin{cases} y = 9 - 2x \\ y = x \end{cases}$$



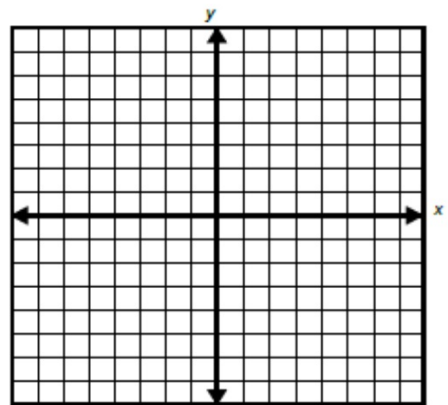
$$2) \begin{cases} x + y = 2 \\ y = 2x + 5 \end{cases}$$



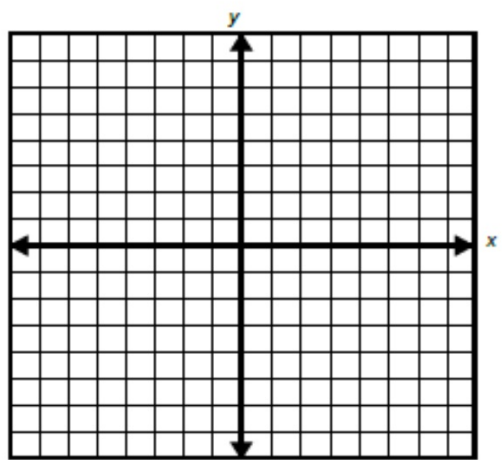
3)
$$\begin{cases} 2x + y = 0 \\ x - y = 6 \end{cases}$$



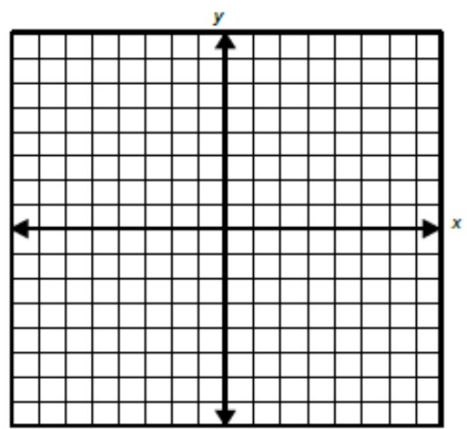
4)
$$\begin{cases} 3x - 9y = 0 \\ 3y + 3 = x \end{cases}$$



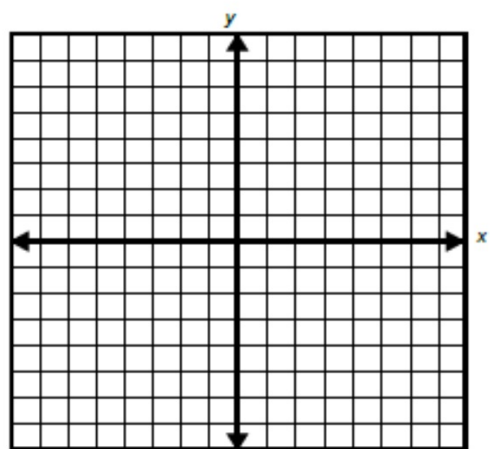
$$5) \begin{cases} y = \frac{1}{2}x + 1 \\ x + 2 = 2y \end{cases}$$



$$6) \begin{cases} y - 2x = -5 \\ y - x = -3 \end{cases}$$



$$7) \begin{cases} 2y - x = 2 \\ x - 2y = 8 \end{cases}$$



$$8) \begin{cases} 6x - 3y = 9 \\ \frac{y+3}{2} = x \end{cases}$$

$$\begin{array}{r} 6x - 3y = 9 \\ -6x \quad -6x \\ \hline -3y = -6x + 9 \\ \frac{-3y}{-3} = \frac{-6x}{-3} + \frac{9}{-3} \\ \boxed{y = 2x - 3} \end{array}$$

$$\begin{array}{r} 2 \left(\frac{y+3}{2} \right) = (x) 2 \\ y+3 = 2x \\ \sim 3 \quad \sim 3 \\ \hline y = 2x - 3 \end{array}$$

